

Work Order ID 75941

\*75941\*

Page 1

November-02-11 8:03:58 AM

ASAP

Item ID: D3806-5 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Bar  
 Start Date: 02/11/2011 Start Qty: 10 \*6\* Cust Item ID:  
 Required Date: 11/11/2011 Req'd Qty: 10 \*6\* Customer:  
 Reference:

Approvals: Process Plan: M.C.J. Date: 11/11/02 Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3806	B								

100 0.00  
 \*100\*  
 Cold Saw Memo 0.00  
 Hyd Mech Cut blanks at 44.00"  
 \*\*\*FOR CLAMPING PURPOSE WHEN WELDING .500" WAS ADDED ON  
 LENGTH AND IT WILL BE CUT TO LENGTH AFTER WELDING\*\*\* SL 11-11-02 (10)

110 0.00  
 \*110\*  
 HAAS I Memo 0.00  
 HAAS CNC vertical machine #1 1-Mill as per folio FB070 & dwg  
 FOLIO REV: B  
 DWG REV: B  
 2-Deburr as required  
 11/11/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75941

**\*75941\***

Page 2

November-02-11 8:03:58 AM

Item ID: D3806-5

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Bar

Start Date: 02/11/2011 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 11/11/2011 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC Quality Control	QC2- Inspect parts off machine FAI/FAIB  Memo ***FOR CLAMPING PURPOSE WHEN WELDING .500" WAS ADDED ON LENGTH AND IT WILL BE CUT TO LENGTH AFTER WELDING***	0.00  0.00	<i>FK- 11/11/08</i> <i>BL 11/11/07</i>			<u>10</u>			
130 <b>*130*</b> QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00	<i>am 11/11/08</i>			<u>10</u>	<u>2</u>		
133 <b>*133*</b> Large Fab Large Fab	Weld per dwg A/R Hardcoat S.S. Batch: _____  Memo 1- On D3806-5, fill cut outs with hardcoat welding rod as per dwg D3805 2059 B Hardcoat Welding Rod BATCH# <u>M119615</u>  ***CUT BAR TO FINISH SIZE AFTER WELDING HARD COAT***	0.00  0.00				<u>(10)</u>	<u>MAL/R</u>	<u>11-11-28</u>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75941

**\*75941\***

Page 3

November-02-11 8:03:58 AM

Item ID: D3806-5

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Bar

Stop **\*NS2\***

Start Date: 02/11/2011 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 11/11/2011 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
136 <b>*136*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds  Memo	0.00  0.00							
			welding inspection done on assembly w/o						
137 <b>*137*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00							
140 <b>*140*</b> Packaging Packaging	Identify as per dwg & Stock Location: <u>w/t</u>  Memo	0.00  0.00							

EL 11-16-29 X10.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 75941****\*75941\***

Page 4

November-02-11 8:03:58 AM

Item ID: D3806-5 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Bar  
Start Date: 02/11/2011 Start Qty: 6.00 **\*6\*** Cust Item ID:  
Required Date: 11/11/2011 Req'd Qty: 6.00 **\*6\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC21- Final Inspection - Work Order Release	0.00							
<b>*150*</b>									
QC	Memo	0.00							
Quality Control									

11/11/30 *[Signature]*  
MF  
11-11-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

November-02-11 8:04:02 AM

Page 1

Work Order ID: 75941

**\*75941\***

Parent Item: D3806-5

**\*D3806-5\***

Parent Item Name: Bar

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A 08-07-21 new issue DD verified by:ec  
IPP Rev:B 08-09-23 redesign DD verified by:EC  
IPP Rev:C 08-12-05 chg mat. thickness DD verified by:EC IPP Rev:D  
11.10.04 rev.b as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B0.500X2.500		Purchased	No			100	f	91.0870	3.666	23.15368			

**\*M304B0 500X2 500\***

304 BAR .500 x 2.50

**\*\***

23 11-11-07

Location

Loc Qty

Loc Code

MAT050

91.087

112764

8.312

116135

0.375

117685

4.4

119231

78

23 16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1

D

D

**D3806-1 BAR**

**D3806-5 BAR**

C

C

**D3806-3 BAR**

**D3806-7 BAR**

B

B

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
WORK ORDER  
NO. 75941 M.C.J  
11/11/02

**RELEASED**  
2011-10-03

A

A

B	REVISED D3806-1/3 TO EASE MANUFACTURABILITY; 4.0 WAS 4.00; CHANGED MATERIAL STOCK FOR D3806-1/3/5/7 PER PAR11-108	MB	11.09.29
A	NEW ISSUE	MB	08.11.21
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>dp</i>	<b>DART AEROSPACE USA, INC.</b> KENT, WA	
DRAWN	<i>dp</i>	DRAWING NO.	REV. B
CHECKED	<i>dp</i>	D3806	SHEET 1 OF 3
MFG. APPR.	<i>dp</i>	TITLE	SCALE
APPROVED	<i>dp</i>	BAR	NTS
DE APPR.	<i>dp</i>	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	
DATE	11.09.29		

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

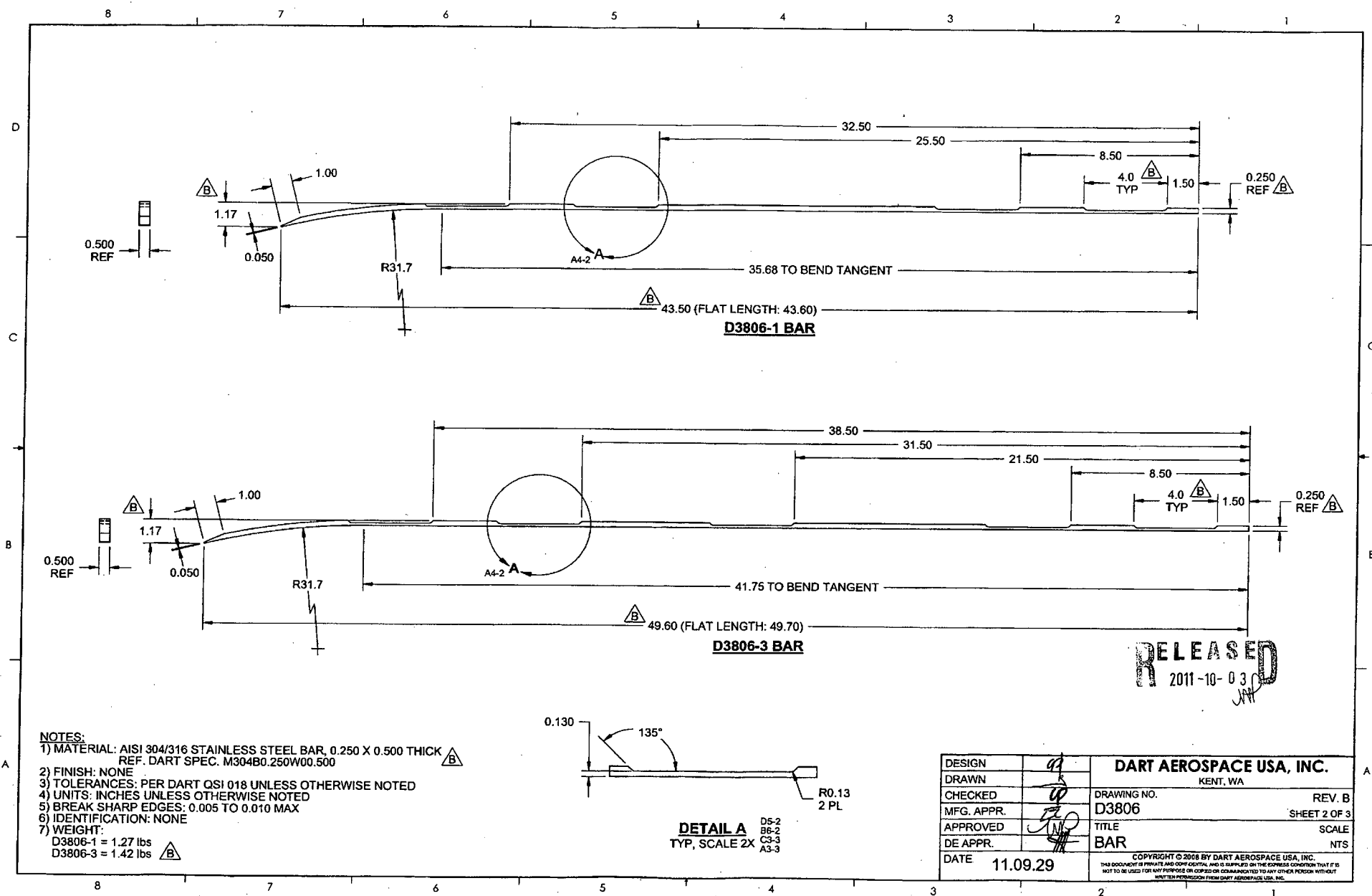
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

75941



RELEASED  
2011-10-03

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL BAR, 0.250 X 0.500 THICK REF. DART SPEC. M304B0.250W00.500
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT:  
D3806-1 = 1.27 lbs  
D3806-3 = 1.42 lbs

**DETAIL A**  
TYP, SCALE 2X

DESIGN	9	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	5	KENT, WA	
CHECKED	UP	DRAWING NO.	REV. B
MFG. APPR.	5	D3806	SHEET 2 OF 3
APPROVED	NY	TITLE	SCALE
DE APPR.	NY	BAR	NTS
DATE	11.09.29	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

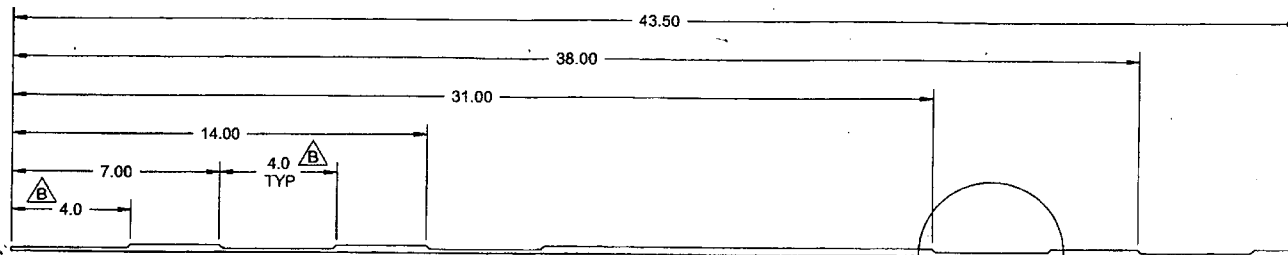
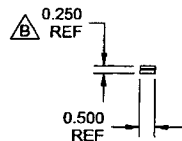
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

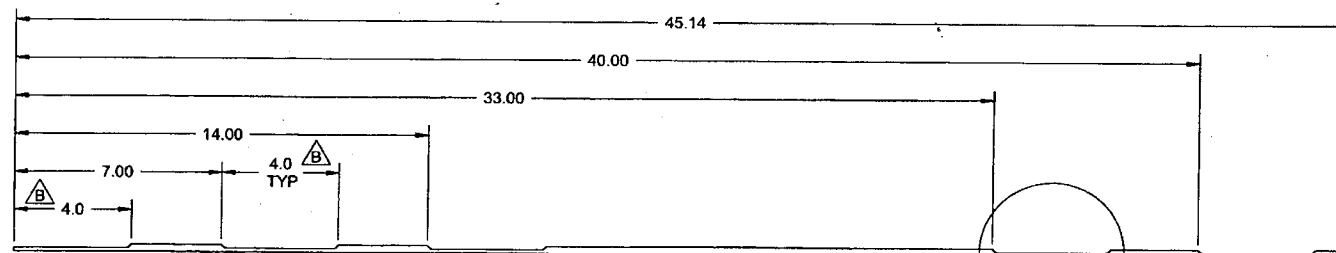
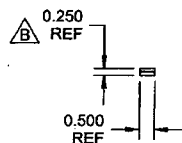
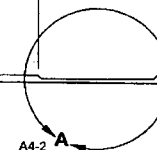
**NOTE:** Date & initial all entries



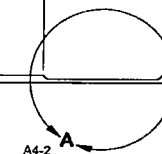
75941



**D3806-5 BAR**



**D3806-7 BAR**



**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL BAR, 0.250 X 0.500 THICK  
REF. DART SPEC. M304B0.250W00.500
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT:  
D3806-5 = 1.22 lbs  
D3806-7 = 1.28 lbs

**RELEASED**  
2011-10-03

DESIGN		<b>DART AEROSPACE USA, INC.</b>	
DRAWN	<i>[Signature]</i>	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3806	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BAR	NTS
DATE	11.09.29	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries